REMARKS

Claims 1-7, 9-12 and 14-20 are pending. Claims 21-29 were withdrawn from consideration due to a restriction requirement and are now cancelled.

Claim Rejections - 35 U.S.C. § 102

A. Rejection based on *Cole*

Claims 1, 3, 5 and 9-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Cole* (U.S. Patent 5,994,970). Favorable reconsideration is requested.

The present invention, as recited in claim 1, is a temperature compensated oscillator. The oscillator has a temperature detection circuit and a temperature compensation circuit. The temperature compensation circuit keeps an oscillation frequency signal substantially constant based on the temperature detection circuit. The oscillator also has a selection means for selecting whether to enable or disable the temperature compensation function.

Applicant respectfully submits that *Cole* does not disclose "wherein a selection means is provided which selects whether to enable or disable a temperature compensation function of said temperature compensation circuit" as recited in claim 1.

The Examiner alleged that the program interface 24 of *Cole* is a selection means for selecting whether to enable or disable a temperature compensation function as recited in Claim 1. (Office Action, page 3.)

Applicant's previous arguments stated that the program interface of *Cole* is only used

during the manufacture of the oscillation circuit to calibrate the crystal's characteristics. (Col. 4,

lines 1-4.) Correct capacitive loads are determined for several discrete temperatures. The values

are interpolated and data for the look-up table is generated. (Col. 4, lines 9-19.) Once the crystal

has been calibrated, the program interface is no longer used. (Col. 8, lines 35-39.) The switched

capacitor array is continuously adjusted based on the temperature and the temperature coefficient

look-up table.

The Examiner takes the position that "whether or not the program interface of *Cole* is

used during a calibration process or not is irrelevant to the fact that *Cole* discloses these

limitations: whether to switch in or out capacitors in array 22." (Office Action, pages 8-9.)

However, regardless of whether the program interface is used only for manufacture, the

program interface does not have a selection means for selecting whether to enable or disable the

temperature compensation function. The Examiner stated that the program interface selects

whether to switch in or out capacitors. Determining whether to switch in or out capacitors during

calibration is not the same as selecting whether to enable or disable temperature compensation

function.

Part of the passage of *Cole* cited by the Examiner states:

> While at each temperature the output frequency of the device is tested and
> at the same time the correct capacitance for compensating the output
> frequency is determined. The programming interface switches the
> capacitor array until the output is correct.

(Col. 8, lines 28-32.) While the program interface selects whether to switch capacitors in our out at various temperatures, temperature compensation is enabled. The program interface selects which capacitors are required to compensate the oscillator at various temperatures. The program interface does not select whether to enable or disable temperature compensation. The program interface is used only during calibration; thus it would not make sense to disable temperature compensation during calibration. Therefore, *Cole* does not disclose a selection means for selecting whether to enable or disable a temperature compensation function as recited in claim 1.

B. Rejection based on *Oka*

Claims 1, 3, 14-18 and 20 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Oka* (US 6,882,835). Favorable reconsideration is requested.

Applicant respectfully submits that Oka is not prior art based on the perfected foreign priority. The § 102(e) prior art date of *Oka* is August 26, 2002. Foreign priority of the present application is based on Japan Application No. 2002-11998 which was filed on January 21, 2002. The foreign priority document pre-dates the § 102(e) prior art date of *Oka*.

Please see the attached translation of Japan Application No. 2002-11998 and the verification of translation.

Claim Rejections - 35 U.S.C. § 103

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cole* in view of *Gillig* (U.S. Patent 5,856,766); claims 4, 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cole* in view of *Wojewoda* (U.S. Patent 5,731,742); and claim 19 was

rejected under 35 U.S.C. §103(a) as being unpatentable over *Oka*. Favorable reconsideration is requested.

Claims 2, 4, 6, 7 and 19 depend either directly or indirectly from claim 1. Thus, for at least the foregoing reasons these claims are patentable over the prior art. Furthermore, as stated above, Oka does not qualify as prior art based on the perfected foreign priority.

Accordingly, withdrawal of the rejections of claims 1-7, 9-12 and 14-20 is hereby solicited.

Information Disclosure Statement (Filed with this Response)

A. U.S. Patent 5,481,229

In claim 7 of the cited US patent document, a temperature compensated oscillator in which a switch circuit becomes an enabled or disabled state is disclosed.

However, this means that the switch circuit is initialized to the disabled state when power is first applied, and after a predetermined time following initialization, the switch circuit is switched to the enabled state. Accordingly, it is different from a selection means of the present invention, which can select whether to enable or disable the temperature compensation function of the temperature compensation circuit.

This is described in column 4, lines 1-22 of the patent document with reference to Fig. 2, and as can be seen from the explained structure of a programmable DC-DC converter network (PDCCN) 60, which is PDCCN 100 in Fig. 2, it is clear that the switch circuit 104 corresponds to "the switch circuit" in Claim 7.

Namely, when the switch circuit 104 of the PDCCN 100 is in the enabled state, the charge pump circuit 110 is used to operate from the power supply 66 and produce higher output voltage which is then routed to the output regulator 112 via line 116, and in the disabled state, the only change is that the power supply 66 is routed directly to the output regulator 112.

Accordingly, the cited document does not describe nor suggest the enabling or disabling function of temperature compensation network 50 or temperature compensation circuit 52 shown in Fig. 1.

Further, the cited document's object is to reduce the electric power consumption in TCXO and the present invention's object is to achieve simplification and high accuracy of the process of adjustment in the temperature compensated oscillator. Accordingly, the objects and effects are also different.

B. U.S. Patent 5,892,408

USP 5,892,408 (D6) discloses a temperature compensated oscillator. In a calibration mode (*see, e.g.*, Fig. 5 and the associated description starting in col. 7, line 56), the frequency of the oscillator (41) is locked by a phase locked loop (51-53) to a desired frequency (47, 57). It is directly evident for a person skilled in the art that the voltage fed to the VCXO (41) for locking the output frequency of the VCXO (41) to the frequency reference (47) (col. 7, lines 65-67) depends on the temperature since the voltage/frequency characteristic of the VCXO is temperature dependent (otherwise, a temperature compensation would not be required at all.) D6 further teaches that the voltage applied to the VCXO in the compensation mode is set by writing

data into memory 44 to ensure that the voltage applied to the VCXO in the compensation mode

is the same that is applied in the calibration mode. (Col. 8.) This has to be repeated for different

temperatures. (Col. 8, lines 62-65.) Thus, D6 compensates the temperature based on a totally

different concept than the present invention.

In view of the above remarks, Applicant submits that that the claims are in condition for

allowance. Applicant requests such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the

Examiner is requested to contact Applicant's undersigned attorney to arrange for an interview to

expedite the disposition of this case.

If this paper is not timely filed, Applicant respectfully petitions for an appropriate

extension of time. The fees for such an extension or any other fees that may be due with respect

to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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Enclosures: Translation of Japan Application No. 2002-11998 w/verification of translation